

7-151

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26 July 1954

MEMORANDUM FOR: THE RECORD

SUBJECT : **Project Monitor**

25X1

1. Time and Place of Meeting: 20 July 1954, Room 2504, Quarters Eye.

2. Attendance:

25X1

3. Purpose: to review the work done to date.

4, 5. Discussion and Conclusions: is making a "state of the art" survey based on the following outline.

25X1

a. **INFRA-RED DETECTORS (0.8 to 4.2 μ)**

- 1) Discussion of "atmospheric window" in relation to cell
- 2) Lead sulphide cells
- 3) Lead telluride cells
- 4) Lead selenide cells
- 5) Kikoin effect infrared detector
- 6) Semi-conductor detectors including binary compounds
- 7) Photomultipliers
- 8) Infrared sensitive phosphors

Characteristics, operating conditions, and circuitry

b. **INFRARED SOURCES**

- 1) Tungsten sources: filters
- 2) Cesium sources, particularly point sources
- 3) Germanium shutter
- 4) Modulated semi-conductor sources
- 5) Xenon and other sources

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DOCUMENT NO. 8
NO CHANGE IN CLASS. ☐
☐ DECLASSIFIED
CLASS. CHANGED TO: TS S ©2010
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c. IMAGE CONVERTERS

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- 1) Data on all types
- 2) Image intensifiers
- 3) Optics
- 4) Electron telescopes

d. TIME DELAYS

- 1) Electrostrictive type
- 2) Electroscope or ionization chamber types

e. POWER SOURCES

- 1) Isotope batteries
- 2) Transfer process cells
- 3) Mercury cells and other commercially available batteries
- 4) Solar batteries

f. ENERGY STORAGE SYSTEMS

g. INFRARED BARRIER SYSTEMS, INFRARED COMMUNICATION SYSTEM,
INFRARED DETECTION SYSTEM

The "state of the art" survey will include:

a. Literature survey of books and periodicals and other published material.

b. Literature survey of government contracts and other unpublished work.

c. Survey of personal contacts and interviews.

A card file of all references will be made and photostats of pertinent and important papers will be submitted. The final survey with all references will be abstracted on McBee cards.

A discussion on the completeness of the coverage required for the survey produced the conclusion that the field should be covered completely, but that emphasis should be placed on those subjects which appear to have the greater possibility of application to the ultimate devices which APD is attempting to obtain or produce. At

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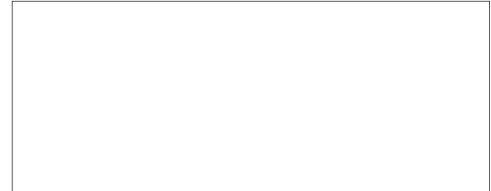
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the present time, these include a hand-held infrared communications unit, satisfactory infrared sources and viewers, and an infrared surveillance indicator.

In his preliminary search, [] has agreed to inform us almost immediately of any readily applicable item that he uncovers.

6. Action: APD will maintain weekly liaison with [] throughout his stay in Washington.



TSS/APD

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